

**Scientific and Technical Employee Development (STED) Meeting
November 15 - 17, 2006 @ NTC, Denver, CO**

Committee members:

Name	Role/Affiliation
Steve Blanchard	WRD Senior Staff
Virginia de Lima	Center Director
Dorrie Gellenbeck	NWIS
Bob Hainly (Co-Chair)	Data Chiefs
Bill Hazell	Hydrologic Technician
Leo House	NRP
Mike Nolan	OSW
Dave Pollock	OGW
Donna Schiffer (Co-Chair)	Data Chiefs
Kurt Schultz	IT Specialists
John Trommer	Studies Section Chiefs
Alan Ward	OED
Franceska Wilde (not present)	OWQ

Committee Overview and History – Donna Schiffer

- Membership
 - 5 permanent members – OSW, OGW, OWQ, WRD Senior Staff, OED
 - Rotating members (7) have 2-year term, represent cost center interests
 - Membership needs? – reports specialist, hydrologist, project-support hydrologic technicians
 - Other membership needs – John Trommer retiring in 2007?
 - **DECISION** – develop a vice-chairperson position to assist with committee activities and to create a succession process for chairperson position
- History
 - Employee Development Committee – established 1999 by WRD memo 99.36
 - STED – revised membership of EDC to be a WRD-specific committee, established in 2002 to guide specific WRD scientific & technical employee development
- Charter
 - Charter objective is to promote scientific and technical employee development, which goes beyond just ‘training’
 - Current (2002) version needs to be updated with new member information, planned meeting schedule, and version date.
 - **DECISION** - make charter updates by developing a new charter; revise original charter and keeping an archived copy of the former version.
 - **ACTION ITEM** – Steve Blanchard to revise charter and distribute for review.
- Communication
 - Committee purpose is to present issues, provide feedback, and make recommendations to Water Senior Staff
 - Members are to send information out to constituency and return input
 - Objective is to receive needs and communicate new or developing training/development opportunities
 - **DECISION** – Committee should routinely review membership to ensure that all technical groups in WRD are represented and receiving communications
 - Hold face-to-face meetings at WSC? (similar to ITAC model)

- Use conferences/meetings to advertise STED?, - e. g. Data Chief conferences, Cost Center Manager meetings, Studies Chief meetings
- Build on the current web page to lead WRD employees to training opportunities (without being redundant with OED)

Committee Operations – Donna Schiffer

- Meetings
 - Bi-monthly calls on last Thursday of month at 1:00 EST/EDT
 - Annual face-to-face meeting
- STED web page
 - Use to archive and make available committee materials (Charter, membership list, meeting minutes, goals and current activities)
 - **ACTION ITEM – Donna Schiffer to post any available minutes from past meetings to STED web page**

Committee – Current Challenges and Past Results – Donna Schiffer

- Challenges (for Committee)
 - Voluntary membership, costs are not reimbursed
 - No assigned administrative support (for minutes, logistics of meetings)
 - Dwindling resources for training center and cost centers (in tight times often training is one of the first planned expenses to be cut)
- Challenges (for WRD)
 - Meeting needs of an entry-level workforce that ensures continuity of the WRD science, institutional knowledge, and standard protocols
 - Providing employee development opportunities for current staff to learn new skills as the need arises (creating a more robust workforce that responds to changing science needs/priorities)
- Results from past committee activities
 - NTC transition to a Bureau facility
 - Developing support line to OED
 - Development of Continuous Learning Policy
 - Development of ListServ capability
 - Development of TEL courses and Breeze capability
 - Analysis of case for resurrecting the former Graduate School program, cost/benefit, feasibility

DOI LEARN discussion – Melanie Hood

- DOI LEARN is system that will be used by the entire Interior Dept.
- New help line established just for USGS concerns/questions.
- TMS (Training Management System) is/was a USGS system only. DOI LEARN will replace TMS when SF-182 forms are available online. Group processing still is not available in DOI LEARN.
- Local databases will be prohibited when DOI LEARN implemented (intent is to create a single bureau-wide database).
- Five 'roles' in DOI LEARN:
 - Bureau coordinator – Melanie Hood for USGS, contact her for info
 - Supervisor/alternate approver role – final approval, no financial accounting; may require some training for supervisors/approvers
 - Employee role – review catalogs, select courses
 - Data steward role

- Instructor/course-coordinator role – change a “course” to a “class”
- DOI Learn Instructor training –Melanie teaches this class
- Competency module will be part of next release
 - Database will be loaded with full ‘competencies’ for different job series
 - **ACTION ITEM** – Donna Schiffer to develop a draft position paper for “essential and recommended” technical training for new employees in support of OED competency models for technical employees
 - **ACTION ITEM** – Mike Nolan to work with OED to provide link to Western Region Hydro Tech Toolbox in support of OED competency models
- Check ‘training.usgs.gov’ and ‘DOI LEARN’ to view differences between TMS and DOI LEARN.

Regional Training Reports – Steve Blanchard

- Steve handed out reports from 4 Regions
- Impression from Regions is that courses not being taught at NTC are now being offered by Regional or WSC technical staff
 - Is Regional training more cost effective?
 - Is there a pecking order for NTC and Regional courses?
- Regional training allows for focus in areal differences in methods to be taught while the NTC system promotes standardized instruction
- NTC courses promote interchange between regions
- There are some courses that are more appropriate for one venue than another

TEL Course Development & Discipline Office Reports – Steve Blanchard

- Discipline Offices polled to determine TEL course priorities
- OGW: no courses selected
- OWQ: Water-Quality Principles
- OSW: Ratings Course (completed), Data Aging, GRSAT
- NWIS: no courses selected
- Suggested that course nomination numbers are low because of huge time investment expected to convert to TEL course
- **DECISION** – Determine whether multi-disciplinary reports presentation is needed?
 - **ACTION ITEM** - Mike Nolan will check with Keith Kirk about possibility of putting together a Power Point presentation on the new reports process.
 - Sandy Cooper (SE Region Reports Specialist) has a web page and has sent out guidance.

NWIS TEL Training – Dorrie Gellenbeck

- NWIS uses 2 types of training – informational and software training
- NWIS uses 2 methods to deliver training – Cyber seminars and instructor-led (for Database Administrator classes)
 - Some info courses are available online – e. g. NWIS and QWDATA overviews
 - Some “homegrown” WSC how-to courses have been developed and used locally
- Suggestion by NWIS – use DOI LEARN to link to presentations and use number of hits compilation to determine priorities for TEL conversion
- **DECISION** - Suggested that STED recommend courses to NWIS Executive Steering Committee (ESC) that we feel are important to develop or make available in TEL
- **ACTION ITEM** - Steve Blanchard will communicate with NWIS and bring recommendation to the ESC to consider TEL course conversions.

NRP TEL Training – Leo House

- Current status - NRP is primary source of instructors and developers of NTC courses for WRD
 - On average, NRP staff teach (or team teach) 12-18 technical courses and are involved in development of 3-5 courses per year
 - Staff is expected to spend 30 percent of their time in technical consulting and training activities
- Trends – NRP observations
 - Fewer course are being offered at NRP (regional) centers
 - 30% drop in formal NRP participation in courses since 1990
 - Requests for courses are now coming from different places (e. g. Regional and WSC specialists, 'peer to peer' on-site)
 - Increase in NRP involvement in regional-sponsored courses
 - Increase in NRP on-site/OJT at WSC's
 - Increase in popularity in NRP lecture series
- Challenges for NRP scientists to provide/deliver training
 - **DECISION** – Promote activities to preserve specialized knowledge of retiring scientists
 - **ACTION ITEM** – Leo House to approach NRP scientists to produce a course or presentation in their area of expertise and narrate it themselves before they retire
 - Suggest approaching Bob Mead (Emeritus Scientist) to produce large-river sedimentology presentation
 - Luna Leopold did an informal video interview that is available somewhere
 - C.V. Theis also had been interviewed similarly
 - John Costa has done presentations on debris flows & flow in alluvial rivers (This was recently converted to DVD.)
 - **ACTION ITEM** – Steve Blanchard to locate previously recorded videos and make available on web (Internet location to be determined.)
 - Provide more broad-based training – develop 2-day topical research seminars?

TEL Course Posting Notification – General Discussion

- Different display of course catalog (e. g. by type, by level) not currently available
- How to notify WRD/USGS of in-house training and presentations within DOI LEARN?
 - Advertise the availability of these courses on OED's page?
 - Send e-mail similar to WRD course announcements?
- **DECISION** - We expect to use DOI LEARN as our primary training tool in the future.
- Melanie Hood has a basic form for posting courses to DOI LEARN.
- **ACTION ITEM** - Mike Nolan will work with Melanie to post some of his regional course notices on DOI LEARN.

TEL Course Standards – General Discussion

- Rigid instructional design criteria for Breeze software might inhibit the development of the courses.
- Do we have to meet all OED standards for courses? (e.g. color standards)
- Can time-tested courses be converted without a large resource investment?
- Should STED look at University on-line training for ideas on how to implement TEL?
- Parts of some courses could be TEL and part classroom ('blended'). Example: Hydroacoustics courses could be taught using TEL to prepare for the hands-on part of the class.

- **DECISION** - it should not be mandatory that all courses go through same strict Breeze course requirements
 - **DECISION** - Non TEL-standard courses will be labeled as presentations
- Core competency/requirements
 - Who decides the level of assessment? Is it course coordinator/SME (Subject Matter Expert)?
 - When developing a set of courses, will an assessment be used to 'pass' on to the next course?
 - Post-assessment would be good just for the supervisor to know that the student did take the online class.

TEL Program Overview – TJ Lane

- Blended learning techniques have been shown to work best for most courses
- “Instructor Led Training” (ILT) vs. Online Training (OLT)
 - Courses that rely on face-to-face communication (Leadership) do not work well as OLT courses
- Suggested that recent online course-delivery issues be repaired rather than make a shift towards increased offline delivery (e. g. CD's, electronic transfer via e-mail)
- Evaluation/assessment component – valuable, can only be used in Breeze courses
 - A presentation only transfers information; courses can include an assessment
 - Assessment of course effectiveness to SME adds benefits to Breeze course
 - Assessment allows SME to establish core competency requirements
- Other agencies (F&WS, BLM) are using GeoMaestro to send courses to DOI LEARN
 - Not as functional as Breeze
 - Breeze has functions that meet USGS stricter requirements
- Course development
 - Section 508 standards must be applied to all presentations & courses
 - Review and approval process
 - None established – currently TJ and 2 testers review each lesson
 - Use existing Regional process for technical courses and presentations?
 - Create process to eliminate any bottlenecks by shortage of “approvers”
 - Who has authority to approve addition of course to TEL?
 - New course - Estimate of 220 hr for each hr of course instruction time
 - Existing course - Estimate of 80 hr for each hr of course instruction time
 - OED suggests that SME receive Breeze training before converting a course
 - **DECISION** – Along with SME, assistant to the SME and Lead Instructional Developer (LID) also should consider Breeze training
- Course ownership
 - Current model has SME as owner
 - User groups have responsibility for providing opportunities and updating course material
- STED received course demos of Reimbursable Agreements (completed) and Editing Unit Values (in progress) TEL courses, and Data Aging cyber seminar presentation (converted to Breeze format)

TEL Certification Class (Breeze) Highlights – Russell Smith

- Breeze has a “meeting” option similar to WebEx and SameTime software
 - Can use in live or playback modes
 - Has a streaming video option

- Provided demo of meeting with video, audio, chat, and notes functions

TEL Course Tuition Discussion – Alan Ward

- Tuition investment encourages completion of course requirements
- High tuition fees may discourage course selection
- Tuition receipts can be reinvested into the TEL system and to reimburse non-appropriated SME salary
- **DECISION - tuition is appropriate for certain TEL courses**
 - Develop criteria to evaluate tuition decision on a course-by-course basis
 - Majority of information for decision to come from SME – e. g. salary source, intended audience, hours spent developing course, anticipated hours for updating course materials
 - Type of course also will determine tuition necessity
 - Mandatory vs. elective
 - Basic - simple development, relatively easy to convert to TEL, \$100?
 - Advanced - complex development or newly developed course, need a lot of time to convert to TEL, \$200?
 - Blended – SME time for development (TEL) and in-person delivery
 - Essential – determined to be critical to performing job tasks, small fee and/or subsidized by discipline offices? STED must define “essential”
- Current NTC tuition fee model includes reimbursement for non-appropriated SME/Instructor delivery + preparation (1st time) + travel
- Determination of TEL tuition fees – requires different model – suggestions:
 - Based strictly on per-course SME salary costs, materials needed, necessary investments to TEL system (e. g. software & hardware maintenance)
 - Establish flat fee of set amount per module
 - Must be kept low and reasonable so participation not discouraged
- **DECISION - Tuition will not be charged for new Editing Unit Values TEL course**
- Challenges
 - Some courses could be subsidized; others would need a charge for reimbursement.
 - STED must work to develop tuition fee policy that eliminates arbitrary nature.
 - Charge cooperators a different rate than USGS?
 - Charge other USGS disciplines a higher rate to recoup Breeze costs?
 - Charge fee to other disciplines to host TEL course on WRD Breeze server?
 - Charge different rate for update/refresher course?
- **ACTION ITEM – Alan Ward to develop a draft course tuition policy and fee structure**

TEL Course Conversion Process and Support – Alan Ward

- OED would like to hire a Lead Instructional Developer (LID) to work with TJ Lane
 - Total cost is about \$85K per year
 - Other DOI agencies have suggested one-half support of position
 - If WRD supports one-half of an FTE, cost would be about \$42K.
- **ACTION ITEM - Priority #1 for FY2007 - Steve Blanchard to take recommendation to Senior Staff from STED to request funding for 0.5 FTE for a contractor at OED to assist in the development of TEL courses.**
- Course conversion plan
 - Pursue option of converting ‘self contained’ modules that are part of larger courses (e. g. QW principles course)
 - May require funding for Roger Lee to complete modules

- QW Principles course incorporates a lot of nice features that people are not used to with the typical online courses.
- Would be a good course to show what different techniques can be incorporated into TEL courses.
- Successful launch would help sell TEL concept to wider range of staff.
- **ACTION ITEM - Priority #2 for FY2007 – Steve Blanchard to check with Franceska Wilde to determine funding needed to complete the TEL conversion of QW Principles course. Request a cost/module estimate.**
- STED to work on future courses, prioritizing (from what the Discipline offices have provided) what courses should go into the 'pipeline'.
- Estimate of about \$15K per SME to develop courses.
- OED will need to develop funds transfer system to reimburse costs for SME in cost centers without appropriated funding.
- If we can come up with an SME list to fund, we can forward list and funding request to Senior Staff.
- **ACTION ITEM –Discipline and NWIS office representatives to develop a course-conversion list.**
- **ACTION ITEM – STED committee members to poll constituents to determine short and long term training needs.**
- **ACTION ITEM – Bob Hainly to take results of Discipline and NWIS office polls and constituents' needs survey to develop a draft prioritized course-conversion list.**
- **ACTION ITEM – Steve Blanchard to present final prioritized course-conversion list to Senior Staff along with description of STED short-term goals.**

Ethics Training – Alan Ward

- Training would follow new Code of Scientific Conduct
 - Draft has been approved by Lynn Scarlett (Deputy Secretary DOI).
- Question from OED – How to seamlessly integrate ethics training into scientific courses?
 - Group felt that it is already embedded in courses even if it is not explicitly stated.
 - General feeling from STED that there is an historical culture of ethics and integrity and those with longer service years had the opportunity to work side by side with individuals who had exemplified this 'code of ethics'.
 - Is workforce as a whole 'less ethical' than 20 years ago?
 - Changes in technology have allowed opportunities for less ethical behavior.
- Are we are recruiting people and not providing the training or orientation that we once did? These lessons may be missing from orientation and OJT.
- Is there another way we can expose people to these concepts?
 - A module on ethics probably would not go over well (more mandatory training).
- **DECISION – Suggested methods to transmit and reinforce Code of Scientific Conduct**
 - Ethics should continue to be part of new employee orientation (link from OED).
 - Author training would provide opportunity to address topics like plagiarism.
 - Including ethics in NWIS training could emphasize needs for database integrity.
 - Continue to provide ethics training in Supervisory Challenge class.
- Ethics web page: <http://internal.usgs.gov/ops/hro/ethics/ethics-intro.html>

Collaboration Awareness Training – Alan Ward

- Director initiative to promote work among USGS Disciplines
- Similar issue to ethics training – incorporate into technical training courses?
 - Will most likely become part of orientation, supervisory, and leadership training

- **DECISION** – Most of WRD already poised to collaborate. Specific training is not needed because awareness is not an issue.

NTC Status, Use Statistics, and Trends – Alan Ward

- New services available for OED
 - ListServ process established to announce course offerings
 - Fair number of WRD people have signed up but fewer than expected
 - OED not sure why participation in ListServ is less than anticipated.
 - Hosting off-site courses
 - Have cache of 13 deployable laptops, a projector, and cabling to ship off-site upon request
 - Providing support for administrative courses
- NTC use statistics
 - Number of courses and participants gradually decreasing from 2004 spike, but not as low as 2003 minimum
 - Non-USGS participation has gradually decreased to very low number
 - About two-thirds of participants are from WRD
- **ACTION ITEM** – Alan Ward will look at a process to add regional technical courses into course participation database so that info can be added to training statistic summaries
- NTC facility “re-tooling” to meet changing training style needs
- Fee structure developed to serve outside users of NTC services and facilities

ASE (Advanced Scientific Education) Program – Donna Schiffer

- Idea first submitted to Senior Staff in July 2005. At that time Senior Staff requested:
 - Flowchart of process
 - Draft application form
 - Draft announcement memorandum
- Local training & local control – rejuvenated program would only fund tuition and books
- Program would remain small as a result of limited funding
- OPM now allows reimbursement for course costs for purpose of obtaining degree
- Course selection - should courses be limited only to graduate level?
- Funding mechanism suggestions:
 - Disburse funding to selected WSC's and allow local determination of priorities
 - Selection could be based on financial inability to promote training that will assist in developing new program
 - Disburse funding to WRD Regional Program Officers; disbursement to WSC's based on Regional priorities for science needs
 - In either case, request feedback on success of program, disbursement method
 - Workforce planning effort is best for long-term strategy of program
- **DECISION** - Table development of ASE program and focus on successful TEL course development and delivery.

STED Workplan Development – Bob Hainly

- Plan would be used to identify short and long-term goals and track progress
- Suggested to view existing ITAC plan; use as model for STED?
- As a start, poll constituencies to gather recommendations for STED workplan goals
- **DECISION** - develop a committee workplan describing short and long term goals

Next meeting: *Teleconference - Thursday, February 1st, at 1:00 pm EST*